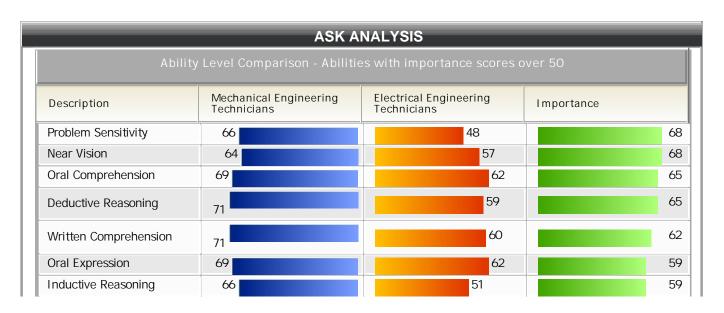
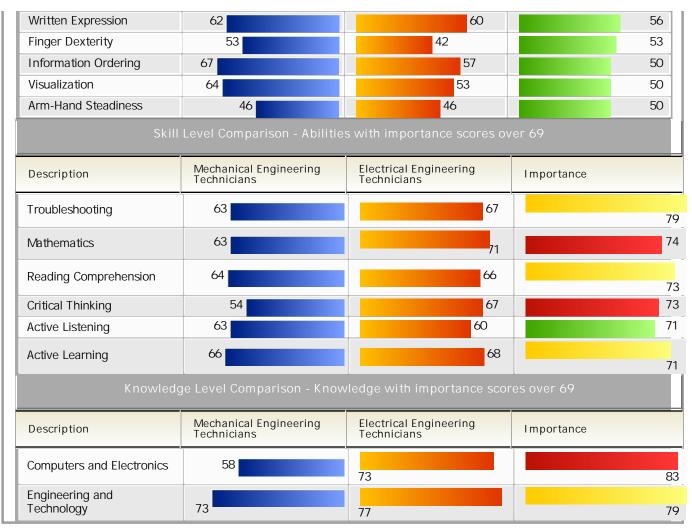
# TORQ Analysis of Mechanical Engineering Technicians to Electrical Engineering Technicians

				INPUT	SECT	ION	:					
Transfer		Title			O*NE	Г	Filters	S				
From Title:		Mechan Technic	nical Engin cians	eering	17-30	27.00	Abilitie	es: Im		nce Level	.: W	/eight:
To Title:		Electric Technic	al Enginee cians	ering	17-30	023.03	Skills:			nce Level	.: W	/eight:
Labor Marke Area:	Labor Market Maine Statewide					Knowl	edge: Im		nce Level	: W	/eight:	
OUTPUT SECTION:												
Grand TORQ: 91												
Ability TOR	Q			Skills TORQ				Knowled	ge TO	RQ		
Level			96	Level			84	Level				92
Gaps T	o Narro	ow if Pos	ssible	Upgrade These Skills			Knowledge to Add					
Ability	Level	Gap	Impt	Skill	Level	Gap	Impt	Knowle	dge	Level	Gap	Impt
No Critical G	aps Rec	orded!		Critical Thinking	67	13	73	Comput and		73	15	83
				Mathematics	71 67	8	74 79	Electror Enginee				
				Troubleshooting Reading Comprehension	66	2	73	and Technol	Ü	77	4	79
Active					68	2	71					
				ne Target Electrica								





Dola	ted Work Experience Compar		cation Comparison	usation Lavel Compa	ricon	
Keia	ted Work Experience Compar	15011	Required Education Level Comparison			
Description	Mechanical Engineering Technicians	Electrical Engineering Technicians	Description	Mechanical Engineering Technicians	Electrical Engineering Technicians	
10+ years	10%	0%	Doctoral	O%	O%	
8-10 years	1%	2%	Professional Degree	0%	0%	
6-8 years	7%	19%	Post-Masters Cert	0%	2%	
4-6 years	2%	14%	Master's Degree	0%	0%	
2-4 years	39%	28%	Post-Bachelor Cert	0%	0%	
1-2 years	10%	23%	Bachelors	43%	21%	
6-12 months	0%	0%	AA or Equiv	23%	24%	
3-6 months	4%	0%	Some College	U%	32%	
1-3 months	11%	0%	Post-Secondary Certificate	14%	19%	
0-1 month	0%	0%	High Scool Diploma	16%	0%	
None	11%	12%	or GED			
			No HSD or GED	0%	0%	
Mechanical Engineering Technicians Electrical Engineering Technicians						
	Most Comm	on Educationa	al/Training Requiremer	rt:		
Associate deg	ree		Associate degree			
Job Zone Comparison						



Previous work-related skill, knowledge, or experience is required for these occupations. For example, an electrician must have completed three or four years of apprenticeship or several years of vocational training, and often must have passed a licensing exam, in order to perform the job.

Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree. Some may require a bachelor's degree.

Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers.

Previous work-related skill, knowledge, or experience is required for these occupations. For example, an electrician must have completed three or four years of apprenticeship or several years of vocational training, and often must have passed a licensing exam, in order to perform the job.

Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree. Some may require a bachelor's degree.

Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers.

# **Tasks**

#### Mechanical Engineering Technicians

#### Core Tasks

#### Generalized Work Activities:

- Getting Information Observing, receiving, and otherwise obtaining information from all relevant sources.
- Interacting With Computers Using computers and computer systems (including hardware and software) to program, write software, set up functions, enter data, or process information.
- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.
- Identifying Objects, Actions, and Events -Identifying information by categorizing, estimating, recognizing differences or similarities, and detecting changes in circumstances or events.
- Evaluating Information to Determine Compliance with Standards - Using relevant information and individual judgment to determine whether events or processes comply with laws, regulations, or standards.

#### Specific Tasks

# Occupation Specific Tasks:

- Analyze test results in relation to design or rated specifications and test objectives, and modify or adjust equipment to meet specifications.
- Calculate required capacities for equipment of proposed system to obtain specified performance and submit data to engineering personnel for approval.
- Confer with technicians and submit reports of test results to engineering department and recommend design or material changes.
- Devise, fabricate, and assemble new or modified mechanical components for products such as industrial machinery or equipment, and measuring instruments.

# Electrical Engineering Technicians

#### Core Tasks

#### Generalized Work Activities:

- Inspecting Equipment, Structures, or Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.
- Identifying Objects, Actions, and Events -Identifying information by categorizing, estimating, recognizing differences or similarities, and detecting changes in circumstances or events.
- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.
- Updating and Using Relevant Knowledge -Keeping up-to-date technically and applying new knowledge to your job.
- Processing Information Compiling, coding, categorizing, calculating, tabulating, auditing, or verifying information or data.

# Specific Tasks

#### Occupation Specific Tasks:

- Analyze and interpret test information to resolve design-related problems.
- Assemble electrical and electronic systems and prototypes according to engineering data and knowledge of electrical principles, using hand tools and measuring instruments.
- Build, calibrate, maintain, troubleshoot and repair electrical instruments or testing equipment.
- Collaborate with electrical engineers and other personnel to identify, define, and solve developmental problems.
- Conduct inspections for quality control and assurance programs, reporting findings and recommendations.
- Draw or modify diagrams and write engineering specifications to clarify design details and functional criteria of



- Discuss dialiges in design, method of manufacture and assembly, and drafting techniques and procedures with staff and coordinate corrections.
- Draft detail drawing or sketch for drafting room completion or to request parts fabrication by machine, sheet or wood shops.
- Estimate cost factors including labor and material for purchased and fabricated parts and costs for assembly, testing, or installing.
- Evaluate tool drawing designs by measuring drawing dimensions and comparing with original specifications for form and function using engineering skills.
- Inspect lines and figures for clarity and return erroneous drawings to designer for correction.
- Operate drill press, grinders, engine lathe, or other machines to modify parts tested or to fabricate experimental parts for testing.
- Prepare parts sketches and write work orders and purchase requests to be furnished by outside contractors.
- Read dials and meters to determine amperage, voltage, electrical output and input at specific operating temperature to analyze parts performance.
- Record test procedures and results, numerical and graphical data, and recommendations for changes in product or test methods.
- Review project instructions and blueprints to ascertain test specifications, procedures, and objectives, and test nature of technical problems such as redesign.
- Review project instructions and specifications to identify, modify and plan requirements fabrication, assembly and testing.
- Set up and conduct tests of complete units and components under operational conditions to investigate proposals for improving equipment performance.
- Set up prototype and test apparatus and operate test controlling equipment to observe and record prototype test results.
- Test equipment, using test devices attached to generator, voltage regulator, or other electrical parts, such as generators or spark plugs.

## **Detailed Tasks**

#### **Detailed Work Activities:**

- analyze engineering design problems
- analyze engineering test data
- analyze technical data, designs, or preliminary specifications
- calculate engineering specifications
- communicate technical information

- experimental electronics units.
- Evaluate engineering proposals, shop drawings and design comments for sound electrical engineering practice and conformance with established safety and design criteria, and recommend approval or disapproval.
- Install and maintain electrical control systems and solid state equipment.
- Modify electrical prototypes, parts, assemblies, and systems to correct functional deviations.
- Perform supervisory duties such as recommending work assignments, approving leaves and completing performance evaluations.
- Plan method and sequence of operations for developing and testing experimental electronic and electrical equipment.
- Plan, schedule and monitor work of support personnel to assist supervisor.
- Prepare contracts and initiate, review and coordinate modifications to contract specifications and plans throughout the construction process.
- Prepare project cost and work-time estimates.
- Provide technical assistance and resolution when electrical or engineering problems are encountered before, during, and after construction.
- Review existing electrical engineering criteria to identify necessary revisions, deletions or amendments to outdated material.
- Set up and operate test equipment to evaluate performance of developmental parts, assemblies, or systems under simulated operating conditions, and record results.
- Visit construction sites to observe conditions impacting design and to identify solutions to technical design problems involving electrical systems equipment that arise during construction.
- Write commissioning procedures for electrical installations.

#### **Detailed Tasks**

# Detailed Work Activities:

- analyze engineering test data
- analyze technical data, designs, or preliminary specifications
- · analyze test data
- calculate engineering specifications
- calibrate or adjust electronic equipment or instruments to specification
- communicate technical information
- confer with engineering, technical or manufacturing personnel
- develop plans for programs or projects
- a draw prototypos plans or mans to scalo



- · conduct performance testing
- confer with engineering, technical or manufacturing personnel
- develop plans for programs or projects
- diagnose mechanical problems in machinery or equipment
- draw prototypes, plans, or maps to scale
- estimate cost for engineering projects
- evaluate engineering data
- examine engineering documents for completeness or accuracy
- fill out purchase requisitions
- follow manufacturing methods or techniques
- follow statistical process control procedures
- inspect facilities or equipment for regulatory compliance
- modify electrical or electronic equipment or products
- operate metal or plastic fabricating equipment/machinery
- operate pneumatic test equipment
- operate precision test equipment
- prepare technical reports or related documentation
- read blueprints
- read schematics
- read technical drawings
- read vehicle manufacturer's specifications
- recommend solutions to engineering problems
- record test results, test procedures, or inspection data
- set up and operate variety of machine tools
- test equipment as part of engineering projects or processes
- understand engineering data or reports
- understand service or repair manuals
- understand technical operating, service or repair manuals
- use drafting or mechanical drawing techniques
- use electrical or electronic test devices or equipment
- use knowledge of metric system
- use precision measuring tools or equipment
- · use robotics systems technology
- use scientific research methodology
- use technical information in manufacturing or industrial activities
- use technical regulations for engineering problems

Technology - Examples

- uravy prototypes, plans, or maps to scale
- estimate cost for engineering projects
- evaluate engineering data
- fabricate, assemble, or disassemble manufactured products by hand
- follow manufacturing methods or techniques
- follow statistical process control procedures
- inspect facilities or equipment for regulatory compliance
- install electronic equipment, components, or systems
- install, maintain, or repair electronics manufacturing equipment
- install/connect electrical equipment to power circuit
- manage contracts
- modify electrical or electronic equipment or products
- · operate precision test equipment
- prepare technical reports or related documentation
- read blueprints
- read manufacturing outlines for electronic products
- · read schematics
- read technical drawings
- repair computer controlled manufacturing systems
- repair electronic components, equipment, or systems
- resolve engineering or science problems
- solder electrical or electronic connections or components
- test equipment as part of engineering projects or processes
- troubleshoot electronics manufacturing equipment
- understand detailed electronic design specifications
- understand engineering data or reports
- · understand service or repair manuals
- understand technical information for electronic repair work
- understand technical operating, service or repair manuals
- use drafting or mechanical drawing techniques
- use electrical or electronic test devices or equipment
- use knowledge of metric system
- use precision measuring tools or equipment
- use robotics systems technology
- use scientific research methodology
- use technical information in manufacturing or industrial activities



	g
Analytical or scient	ific software
ANSYS Mechanic	cal
MSC Software Ad	dams
<ul> <li>Spectral Dynami</li> </ul>	cs STARAcoustics
• Spectral Dynami	cs STARModal
• The Mathworks I	MATLAB
• Wolfram Researce	ch Mathematica
Computer aided des	sign CAD software
<ul> <li>Autodesk AutoCA</li> </ul>	AD Mechanical
Autodesk Invent	or
Bentley McroSta	ition
Computer aided	design CAD software
• IBM CATIA V5	
• PTC Pro/ENGINE	ER software
• SolidWorks CAD	software
Computer aided ma	nufacturing CAM software
CNC Mastercam	
Computer aided	manufacturing CAM software
Three-dimension	nal 3D solid modeling software
Development enviro	onment software
• Microsoft Visual	Basic
National Instrum	nents LabVIEW
Industrial control s	oftware
<ul> <li>Computerized nu programming so</li> </ul>	umerical control CNC ftware
Robotic control s	software
• Soft Servo Syste	ms LadderWorks PLC
Internet browser so	oftware
• Web browser so	ftware
Office suite softwar	-e
• Microsoft Office	
Presentation softwa	are
Microsoft Powerl	Point
Project managemen	nt software
Microsoft Project	t
Spreadsheet softwa	are
<ul> <li>Microsoft Excel</li> </ul>	

• use technical regulations for engineering problems

## Technology - Examples

Analytical or scientific software

- Mentor Graphics ModelSim
- Proportional integral derivative control PID software
- Root cause analysis software
- The Mathworks MATLAB

Computer aided design CAD software

- Autodesk AutoCAD software
- Cadence software
- Computer aided design CAD software
- MicroSim Pspice
- OrCAD Capture
- Prentice Hall Electronic Workbench MultiSim

Data base user interface and query software

- Database software
- Oracle software

Development environment software

- Assembler
- C
- Verilog

Document management software

• Adobe Systems Adobe Acrobat software

Graphics or photo imaging software

Graphics software

Industrial control software

- Rockwell RS Logix
- Rockwell RSView

Internet browser software

• Microsoft Internet Explorer

Object or component oriented development software

• Computer aided software engineering CASE tools

Office suite software

• Microsoft Office

Operating system software



Word processing software	• Emulators
Corel WordPerfect software	Spreadsheet software
Mcrosoft Word	Microsoft Excel
Tools - Examples	Spreadsheet software
Accelerometers	Word processing software
Adjustable wrenches	Microsoft Word
Air compressors	Tools - Examples
Clamp-on ammeters	• Pliers
High-voltage amplifiers	Wrenches
• Anemometers	Dual power supplies
Optical microscopes	Ammeters
• C clamps	Wrist anti-static straps
·	Microscopes
Dial calipers	Desktop computers
Electronic comparators	Alternating current AC generators
Compression testing machines	Digital cameras
Coordinate measuring machines CMM	Direct current DC motors
Dynamometers	Dynamometers
Extrusion machines	Frequency counters
Fatigue testers	Nanosecond universal counters
• Mill files	Current probes
Fluid meters	Harmonic analyzers
Rotameters	Welding goggles
• Force sensors	Anti-static heel grounders
Plane-parallel gauge blocks	Impedance meters
Arc welding equipment	Transformers
Bore gauges	Logic analyzers
Go/no-go gauges	Spectrum analyzers
Safety goggles	
Digitizing tablets	Laser printers
Surface grinders	• Lasers
Polishing machines	Bench lathes
Claw hammers	Magnetic pickup tools
Duramatara	Programmable logic controllers PLC



• Durometers	Microcomputers
Vernier height gauges	• Computerized n
Hex keys	Multimeters
mpact testers	Notebook comp
Heat treatment furnaces	Ohmmeters
Injection molders	Oscilloscopes
Vetallographs	
omputerized numerical control CNC lathes	Personal compu
Spirit levels	Phase shifters
Granite surface plates	Phase shift indic
Load cells	Digital plotters
Locking pliers	Dataloggers
Long nose pliers	Direct current D
• Metal inert gas M G welding equipment	• Drills
Marking gauges	Power meters
Bend test fixtures	Power screwdriv
Programmable logic controllers PLC	Q meters
Mcrometers	Screwdrivers
	Function general
Acroprocessors	Soldering equip
Combination milling machines	Desoldering star
Milling machines	Stroboscopes
Digital multimeters	Wire wrap guns
Laptop computers	• Cameras
Nut drivers	Wire strippers
Oscilloscopes	Tachometers
Personal computers	Digital voltmete
Drafting plotters	Wattmeters
Positioning jigs	• Welders
Power drills	Welding hoods
Cylindrical grinders	Wire cutters
Belt sanders	
Band saws	Crimping pliers
Pressure sensors	

Electrical Engineering Technicians
Mcrocomputers
Computerized numerical control CNC machines
• Multimeters
Notebook computers
• Ohmmeters
Oscilloscopes
Personal computers
• Phase shifters
Phase shift indicators
Digital plotters
• Dataloggers
Direct current DC potentiometers
• Drills
Power meters
Power screwdrivers
• Q meters
Screwdrivers
Function generators
Soldering equipment
Desoldering stations
• Stroboscopes
Wire wrap guns
• Cameras
Wire strippers
Tachometers
Digital voltmeters DVM
Wattmeters
• Welders
Welding hoods
Wire cutters
Crimping pliers

- Safety gloves
- Protractors
- Center punches
- Hacksaws
- Offset screwdrivers
- Scribers
- Shear testing fixtures
- Power shears
- · Signal conditioners
- Signal generators
- Arc-joint pliers
- Socket sets
- Soldering equipment
- Combination squares
- Steel rules
- Strain gauges
- Wire strippers
- Measuring tapes
- Dies
- Temperature sensors
- Tensile testers
- Dynamic mechanical analyzers DMA
- Snap gauges
- Screw thread gauges
- Tungsten inert gas TIG welding equipment
- Twin-screw extruders
- Twist drills
- Ultrasound inspection equipment
- Utility knives
- Vacuum molders
- Freon recovery equipment
- Vibration testers



• Spot welders
Welding masks
Dry rod ovens
Wire cutters
Drill presses

Labor Market Comparison						
Description	Mechanical Engineering Technicians	Electrical Engineering Technicians	Difference			
Median Wage	\$ 44,890	\$ 45,180	\$ 290			
10th Percentile Wage	\$ 30,530	\$ 25,770	\$( 4,760)			
25th Percentile Wage	N/A	N/A	N/A			
75th Percentile Wage	\$ 51,860	\$ 61,600	\$ 9,740			
90th Percentile Wage	\$ 61,330	\$ 79,100	\$ 17,770			
Mean Wage	\$ 45,460	\$ 48,740	\$ 3,280			
Total Employment - 2007	130	430	300			
Employment Base - 2006	129	449	320			
Projected Employment - 2016	132	361	229			
Projected Job Growth - 2006-2016	2.3 %	-19.6 %	-21.9 %			
Projected Annual Openings - 2006-2016	3	9	6			

National Job Posting Trends	
Trend for Mechanical Engineering Technicians	Trend for Electrical Engineering Technicians

# Job Trends from Indeed.com

— Mechanical Engineering Tech — Electrical Engineering Tech



Data from Indeed

# **Recommended Programs**

Electrical, Electronic and Communications Engineering Technology/Technician

Electrical, Electronic and Communications Engineering Technology/Technician. A program that prepares individuals to apply basic engineering principles and technical skills in support of electrical, electronics and communication engineers. Includes instruction in electrical circuitry, prototype development and testing; systems analysis and testing, systems maintenance, instrument calibration, and report preparation.

Institution	Address	City	URL
Kennebec Valley Community College	92 Western Ave	Fairfield	www.kvcc.me.edu
University of Maine		Orono	www.umaine.edu/
Southern Maine Community College	2 Fort Road	South Portland	www.smccME.edu

### Telecommunications Technology/Technician

Telecommunications Technology/Technician. A program that prepares individuals to apply basic engineering principles and technical skills to help design and implement telecommunications systems. Includes instruction in communications protocol, data networking, digital compression algorithms, digital signal processing, Internet access, object-oriented and relational databases, and programming languages.

Institution	Address	City	URL
Eastern Maine Community College	354 Hogan Rd	Bangor	www.emcc.edu

# Electrical and Electronic Engineering Technologies/Technicians, Other

Electrical and Electronic Engineering Technologies/Technicians, Other. Any instructional program in electrical and electronic engineering-related technologies not listed above.

Institution	Address	City	URL	
Eastern Maine Community College	354 Hogan Rd	Bangor	www.emcc.edu	
Southern Maine Community College	2 Fort Road	South Portland	www.smccME.edu	

#### Electromechanical Tech./Technician

Electromechanical Technology/Electromechanical Engineering Technology. A program that prepares individuals to apply basic engineering principles and technical skills in support of engineers engaged in developing and testing automated, servomechanical, and other electromechanical systems. Includes instruction in prototype testing, manufacturing and operational testing, systems analysis and maintenance procedures, and report preparation.

Institution	Address	City	URL	
Central Maine Community College	1250 Turner St	Auburn	www.cmcc.edu	
Central Maine Community College	1250 Turner St	Auburn	www.cmcc.edu	

#### Instrumentation Tech./Technician

Instrumentation Technology/Technician. A program that prepares individuals to apply basic engineering principles and technical skills in support of engineers engaged in developing control and measurement systems and procedures. Includes instruction in instrumentation design and maintenance, calibration, design and production testing and scheduling, automated equipment functions, applications to specific industrial tasks, and report preparation.

Address	City	URL
33 Edgemont Dr	Presque Isle	www.nmcc.edu
33 Edgemont Dr	Presque Isle	www.nmcc.edu
	33 Edgemont Dr	33 Edgemont Dr Presque Isle

#### Robotics Tech./Technician

Robotics Technology/Technician. A program that prepares individuals to apply basic engineering principles and technical skills in support of engineers and other professionals engaged in developing and using robots. Includes instruction in the principles of robotics, design and operational testing, system maintenance and repair procedures, robot computer systems and control language, specific system types and applications to specific industrial tasks, and report preparation.

# No schools available for the program

#### Computer Engineering Technology/Technician

Computer Engineering Technology/Technician. A program that prepares individuals to apply basic engineering principles and technical skills in support of computer engineers engaged in designing and developing computer systems and installations. Includes instruction in computer electronics and programming, prototype development and testing, systems installation and testing, solid state and microminiature circuitry, peripheral equipment, and report preparation.

Institution	Address	City	URL
Southern Maine Community College	2 Fort Road	South Portland	www.smccME.edu

# Computer Technology/Computer Systems Technology

Computer Technology/Computer Systems Technology. A program that prepares individuals to apply basic engineering principles and technical skills in support of professionals who use computer systems. Includes instruction in basic computer design and architecture, programming, problems of specific computer applications, component and system maintenance and inspection procedures, hardware and software problem diagnosis and repair, and report preparation.

No schools available for the program

Maine Statewide Promotion Opportunities for Mechanical Engineering Technicians									
O* NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings	
17-3027.00	Mechanical Engineering Technicians	100	3	130	\$44,890.00	\$0.00	2%	3	



17-3023.03	Electrical Engineering Technicians	91	3	430	\$45,180.00	\$290.00	-20%	9
27-1021.00	Commercial and Industrial Designers	91	4	140	\$49,170.00	\$4, 280.00	5%	5
17-3013.00	Mechanical Drafters	89	3	710	\$46,630.00	\$1,740.00	2%	22
17-2141.00	Mechanical Engineers	89	4	620	\$67,210.00	\$22, 320.00	-9%	14
17-2072.00	Electronics Engineers, Except Computer	88	4	210	\$76, 420.00	\$31,530.00	-26%	4
17-2131.00	Materials Engineers	87	4	40	\$70,250.00	\$25, 360.00	-7%	1
17-2112.00	Industrial Engineers	87	4	580	\$68,350.00	\$23, 460.00	11%	22
17-2121.02	Marine Architects	86	4	60	\$75,520.00	\$30,630.00	-9%	1
51-4111.00	Tool and Die Makers	86	3	160	\$51,670.00	\$6,780.00	-11%	2
17-3026.00	Industrial Engineering Technicians	86	3	370	\$51,700.00	\$6,810.00	6%	9
17-2111.03	Product Safety Engineers	85	5	90	\$49,940.00	\$5,050.00	3%	3
17-2031.00	Biomedical Engineers	84	4	20	\$86,560.00	\$41,670.00	-10%	1
17-3023.01	Electronics Engineering Technicians	84	3	430	\$45,180.00	\$290.00	-20%	9
17-2071.00	Electrical Engineers	84	4	260	\$73,050.00	\$28,160.00	-10%	6

Top Industries for Electrical Engineering Technicians									
Industry	NAICS	% in Industry	Employment	Projected Employment	% Change				
Semiconductor and other electronic component manufacturing	334400	11.11%	18,927	16,543	-12.59%				
Navigational, measuring, electromedical, and control instruments manufacturing	334500	7.00%	11,938	11,429	-4.26%				
Employment services	561300	6.59%	11,227	14,209	26.56%				
Wired telecommunications carriers	517100	5. 49%	9,362	7,350	-21.49%				
Federal government, excluding postal service	919999	5. 23%	8,920	8,432	-5. 47%				
Postal service	491100	4. 31%	7,344	7,476	1.80%				



Electric power generation, transmission and distribution	221100	4.15%	7,078	6,510	-8.03%
Communications equipment manufacturing	334200	3. 23%	5,503	5, 547	0.79%
Research and development in the physical, engineering, and life sciences	541710	3.07%	5, 233	5, 583	6.69%
Electrical and electronic goods merchant wholesalers	423600	2.83%	4,829	5, 693	17.90%
Computer and peripheral equipment manufacturing	334100	2.62%	4, 464	2,922	-34.54%
Local government, excluding education and hospitals	939300	2.21%	3,764	4,228	12.34%
Computer systems design and related services	541500	1.90%	3, 241	4,376	35.02%
Professional and commercial equipment and supplies merchant wholesalers	423400	1.69%	2,888	3,367	16.57%
Aerospace product and parts manufacturing	336400	1.59%	2,708	2,758	1.84%

Top Industries for	Mechanio	cal Engine	ering Techni	cians	_
Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
Research and development in the physical, engineering, and life sciences	541710	8.52%	4,072	4,344	6.69%
Navigational, measuring, electromedical, and control instruments manufacturing	334500	6.30%	3,013	2,884	-4. 26%
Testing laboratories	541380	5.16%	2,467	3,037	23.12%
Other general purpose machinery manufacturing	333900	5.01%	2,393	2,376	-0.70%
Semiconductor and other electronic component manufacturing	334400	3.33%	1,593	1,392	-12.59%
Aerospace product and parts manufacturing	336400	3.02%	1,442	1,468	1.84%
Agriculture, construction, and mining machinery manufacturing	333100	2.58%	1,234	1,152	-6.63%
Employment services	561300	2.19%	1,047	1,325	26.56%
Industrial machinery manufacturing	333200	2.14%	1,022	921	-9.88%
Engine, turbine, and power transmission equipment manufacturing	333600	2.05%	980	822	-16.07%
Motor vehicle parts manufacturing	336300	2.00%	957	762	-20.39%
Ventilation, heating, air-conditioning, and commercial refrigeration equipment manufacturing	333400	1.94%	926	852	-8.01%
Medical equipment and supplies manufacturing	339100	1.78%	851	870	2.29%
Communications equipment manufacturing	334200	1.74%	833	839	0.79%
Commercial and service industry machinery manufacturing	333300	1.63%	780	684	-12.28%